



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,150	09/14/2000	Shigeaki Tochimoto	54024-022	9616

7590 08/01/2003

McDermott Will & Emery
600 13th Street NW
Washington, DC 20005

EXAMINER

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
----------	--------------

1722

15

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,150

Applicant(s)

TOCHIMOTO ET AL.

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,12,23-25 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 28-32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,23 and 24 is/are allowed.
- 6) ☒ Claim(s) 2 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Claims 25 and 28-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method, there being no allowable generic or linking claim. Election was made without the indication of traverse in Paper No. 5 and maintained withdrawn in the response of 5/22/03.

Claim Objections

2. The objection to claim 4 is now withdrawn because the claim has been cancelled.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Cima et al (5,387,380).

Cima et al teach an apparatus for forming a three-dimensional product, the apparatus having a layer forming mechanism for forming a layer of material (Fig 1, #13 or Fig2A, #41); an applying head (Fig 1, #15 or Fig 2B, #43 and #43A) for applying plural kinds of materials to the layer; a controller for controlling the applying head to apply materials selectively to a predetermined region on the layer (col 3, lines 2-14 and col 4, lines 12-28); the controller controls the applying head to applying one material

after another material (col 12, lines 3-10) (such as applying binder after applying ink); the controller controls the applying head such that the applying head can apply binder and/or ink.

Regarding the use of one material that becomes stable faster than another material before another material is applied to the layer, this amounts to an intended use of the apparatus and has no patentable weight. Intended use has been continuously held not to be germane to determining the patentability of the apparatus. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim. Inclusion of the material worked upon by a structure being claimed does not impart patentability to the claims. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitation of that claimed. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself. See also MPEP 2114 wherein it states that the apparatus must be distinguished from the prior art in terms of structure rather than function.

Allowable Subject Matter

5. Claims 12, 23-24 allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach the limitations of these claims as stated in

the previous Office actions of papers #s 6 and 9 respectively (mailed 9/5/02 and 1/28/03).

Response to Arguments

7. Applicant's arguments filed 5/22/03 have been fully considered but they are not persuasive.

The Applicant argues, with regard to the amendment to claims 2 and 3, that the controlling operation of the controller is germane to the issue of patentability of the machine.

The Examiner disagrees. In so much as Cima et al may not teach these intended uses (discussed above as not a patentable limitation in an apparatus claim), Cima et al does teach an apparatus with a controller capable of performing this intended use and therefore 35USC102 is satisfied. While functional language in an apparatus claim may be given weight, the weight given is only towards limitations that further define the structural operation of the apparatus. Since the controller of Cima et al controls the order that materials are supplied, it reads on the claimed limitations. The claimed controller does not function to differentiate between ink or binder, nor does it function to differentiate between the stability times of different materials, it merely functions to differentiate between ~~a material~~ a plurality of materials from a plurality of sources in a particular order. Upon review of the Applicant's specification the Examiner had found no evidence that the Applicant had possession of a controller capable of performing these two functions of differentiation. Furthermore, the controller of Cima et al controls the application of material A before material B. It is merely a process

Art Unit: 1722

limitation (having no weight in an apparatus claim) to use as material A an ink and as material B a binder, and it is merely a process limitation (having no weight in an apparatus claim) to use as material A a material with a time for becoming stable that is less than the time for becoming stable of material B.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S Del Sole

J.S.D.
July 25, 2003

Robert Davis

ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 / 1722

7/30/03